

A. AMENDMENTS TO THE CLAIMS

Please add new Claims 16-60.

- 1 1. (ORIGINAL) A method to systematically analyze a next generation
2 telecommunications network to result in creating a provisioning plan and procedures
3 for provisioning the network to provide services for one or more subscribers, the
4 method comprising the steps of:
5 creating and storing information that represents a logical decomposition of the next
6 generation network into a plurality of discrete functional areas;
7 analyzing the information representing the functional areas to identify one or more
8 provisioning requirements for each of the functional areas;
9 defining one or more provisioning procedures and identifying one or more required
10 provisioning tools for each of the functional areas, based on the provisioning
11 requirements; and
12 creating and storing a sequence of execution of the procedures and tools as the
13 provisioning plan.
- 1 2. (ORIGINAL) A method as recited in Claim 1, wherein the steps of creating and
2 storing information that represents a logical decomposition of the next generation
3 network into a plurality of discrete functional areas further comprise the steps of
4 logically partitioning the next generation network into a subscriber customer premises
5 equipment area, an access network and core network area, and a switch and other
6 processors area.

1 3. (ORIGINAL) A method as recited in Claim 2, wherein the step of logically
2 partitioning the next generation network comprises the steps of determining one or
3 more boundaries of the discrete functional areas based on classifying devices
4 according to functions performed by the devices in delivering network services.

1 4. (ORIGINAL) A method as recited in Claim 1, wherein the step of analyzing the
2 information representing the functional areas comprises the steps of identifying one
3 or more network devices that are involved in each of the functional areas, and for
4 each of the identified devices, determining a setup that is required to enable the
5 identified devices to inter-communicate to provide the services to the subscribers.

1 5. (ORIGINAL) A method to systematically analyze a next generation
2 telecommunications network to result in creating a provisioning plan and procedures
3 for provisioning the network to provide services for one or more subscribers, the
4 method comprising the steps of:
5 creating and storing information that represents a logical decomposition of the next
6 generation network into a plurality of discrete functional areas, by logically
7 partitioning the next generation network into a subscriber customer premises
8 equipment area, an access network and core network area, and a switch and
9 other processors area;
10 analyzing the information representing the functional areas to identify one or more
11 provisioning requirements for each of the functional areas, by identifying one
12 or more network devices that are involved in each of the functional areas, and
13 for each of the identified devices, determining a setup that is required to

14 enable the identified devices to inter-communicate to provide the services to
15 the subscribers;
16 defining one or more provisioning procedures and identifying one or more required
17 provisioning tools for each of the functional areas, based on the provisioning
18 requirements; and
19 creating and storing a sequence of execution of the procedures and tools as the
20 provisioning plan.

1 6. (ORIGINAL) A method as recited in Claim 5, wherein the step of logically
2 partitioning the next generation network comprises the steps of determining one or
3 more boundaries of the discrete functional areas based on classifying devices
4 according to functions performed by the devices in delivering network service.

1 7. (PREVIOUSLY PRESENTED) A method, comprising the steps of:
2 before provisioning a next-generation telecommunications network, performing a
3 systematic analysis of the next-generation telecommunications network by
4 the steps of:
5 creating and storing information that represents a logical decomposition of the
6 next generation network into a plurality of discrete functional areas;
7 analyzing the information representing the functional areas to identify one or
8 more provisioning requirements for each of the functional areas;
9 defining one or more provisioning procedures and identifying one or more
10 required provisioning tools for each of the functional areas, based on the
11 provisioning requirements;
12 creating and storing a sequence of execution of the procedures and tools as the
13 provisioning plan;

14 provisioning the next-generation telecommunications network by executing the
15 procedures and tools identified in the provisioning plan in the sequence
16 identified therein.

1 8. (PREVIOUSLY PRESENTED) A method as recited in Claim 7, wherein the steps of
2 creating and storing information that represents a logical decomposition of the next
3 generation network into a plurality of discrete functional areas further comprise the
4 steps of logically partitioning the next generation network into a subscriber customer
5 premises equipment area, an access network and core network area, and a switch and
6 other processors area.

1 9. (PREVIOUSLY PRESENTED) A method as recited in Claim 8, wherein the step of
2 logically partitioning the next generation network comprises the steps of determining
3 one or more boundaries of the discrete functional areas based on classifying devices
4 according to functions performed by the devices in delivering network services.

1 10. (PREVIOUSLY PRESENTED) A method as recited in Claim 8, wherein the step
2 of logically partitioning the next generation network comprises the steps of
3 determining one or more boundaries of the discrete functional areas based on
4 classifying devices according to roles and responsibilities performed by the
5 devices in delivering network services.

1 11. (PREVIOUSLY PRESENTED) A method as recited in Claim 7, wherein the step
2 of analyzing the information representing the functional areas comprises the steps
3 of identifying one or more network devices that are involved in each of the
4 functional areas, and for each of the identified devices, determining a setup that is

5 required to enable the identified devices to inter-communicate to provide the
6 services to the subscribers.

1 12. (PREVIOUSLY PRESENTED) A method as recited in Claim 11, further
2 comprising the steps of defining one or more individual device settings for the
3 setup and storing the individual device settings in a database for use later in actual
4 provisioning.

1 13. (PREVIOUSLY PRESENTED) A method as recited in Claim 12, wherein the
2 step of defining one or more provisioning procedures and identifying one or more
3 required provisioning tools for each of the functional areas, based on the
4 provisioning requirements, comprises:
5 identifying one or more of an Element Management System, Dynamic Host
6 Configuration Protocol server, and Domain Name System server as the
7 required provisioning tools;
8 storing in a database table associations of information identifying the functional
9 areas, individual device settings for the setup, and required provisioning
10 tools.

1 14. (PREVIOUSLY PRESENTED) A method as recited in Claim 7, wherein the step
2 of defining one or more provisioning procedures and identifying one or more
3 required provisioning tools for each of the functional areas, based on the
4 provisioning requirements, includes identifying one or more of an Element
5 Management System, Dynamic Host Configuration Protocol server, and Domain
6 Name System server.

1 15. (PREVIOUSLY PRESENTED) A method as recited in Claim 7, wherein the step
2 of creating and storing a sequence of execution of the procedures and tools as the
3 provisioning plan includes analyzing and resolving one or more inter-
4 dependencies of procedures applicable to subscriber CPE devices, access and core
5 network devices, and switches or other processors.

1 16. (NEW)A computer-readable medium carrying instructions which, when executed by
2 one or more processors, cause:
3 creating and storing information that represents a logical decomposition of the next
4 generation network into a plurality of discrete functional areas;
5 analyzing the information representing the functional areas to identify one or more
6 provisioning requirements for each of the functional areas;
7 defining one or more provisioning procedures and identifying one or more required
8 provisioning tools for each of the functional areas, based on the provisioning
9 requirements; and
10 creating and storing a sequence of execution of the procedures and tools as the
11 provisioning plan.

1 17. (NEW)A computer-readable medium as recited in Claim 16, wherein creating and
2 storing information that represents a logical decomposition of the next generation
3 network into a plurality of discrete functional areas includes logically partitioning the
4 next generation network into a subscriber customer premises equipment area, an
5 access network and core network area, and a switch and other processors area.

1 18. (NEW)A computer-readable medium as recited in Claim 17, wherein logically
2 partitioning the next generation network includes determining one or more boundaries
3 of the discrete functional areas based on classifying devices according to functions
4 performed by the devices in delivering network services.

1 19. (NEW)A computer-readable medium as recited in Claim 16, wherein analyzing the
2 information representing the functional areas includes identifying one or more
3 network devices that are involved in each of the functional areas, and for each of the
4 identified devices, determining a setup that is required to enable the identified devices
5 to inter-communicate to provide the services to the subscribers.

1 20. (NEW)A computer-readable for systematically analyzing a next generation
2 telecommunications network to result in creating a provisioning plan and procedures
3 for provisioning the network to provide services for one or more subscribers, the
4 computer-readable medium carrying instructions which, when executed by one or
5 more processors cause:
6 creating and storing information that represents a logical decomposition of the next
7 generation network into a plurality of discrete functional areas, by logically
8 partitioning the next generation network into a subscriber customer premises
9 equipment area, an access network and core network area, and a switch and
10 other processors area;
11 analyzing the information representing the functional areas to identify one or more
12 provisioning requirements for each of the functional areas, by identifying one
13 or more network devices that are involved in each of the functional areas, and
14 for each of the identified devices, determining a setup that is required to

15 enable the identified devices to inter-communicate to provide the services to
16 the subscribers;
17 defining one or more provisioning procedures and identifying one or more required
18 provisioning tools for each of the functional areas, based on the provisioning
19 requirements; and
20 creating and storing a sequence of execution of the procedures and tools as the
21 provisioning plan.

1 21. (NEW) A computer-readable medium as recited in Claim 20, wherein logically
2 partitioning the next generation network includes determining one or more boundaries
3 of the discrete functional areas based on classifying devices according to functions
4 performed by the devices in delivering network service.

1 22. (NEW) A computer-readable medium carrying instructions which, when executed
2 by one or more processors, cause:
3 before provisioning a next-generation telecommunications network, performing a
4 systematic analysis of the next-generation telecommunications network
5 by:
6 creating and storing information that represents a logical decomposition of the
7 next generation network into a plurality of discrete functional areas;
8 analyzing the information representing the functional areas to identify one or
9 more provisioning requirements for each of the functional areas;
10 defining one or more provisioning procedures and identifying one or more
11 required provisioning tools for each of the functional areas, based on the
12 provisioning requirements;

13 creating and storing a sequence of execution of the procedures and tools as the
14 provisioning plan; and
15 provisioning the next-generation telecommunications network by executing the
16 procedures and tools identified in the provisioning plan in the sequence
17 identified therein.

1 23. (NEW) A computer-readable medium as recited in Claim 22, wherein creating and
2 storing information that represents a logical decomposition of the next generation
3 network into a plurality of discrete functional areas includes logically partitioning the
4 next generation network into a subscriber customer premises equipment area, an
5 access network and core network area, and a switch and other processors area.

1 24. (NEW) A computer-readable medium as recited in Claim 23, wherein logically
2 partitioning the next generation network includes determining one or more boundaries
3 of the discrete functional areas based on classifying devices according to functions
4 performed by the devices in delivering network services.

1 25. (NEW) A computer-readable medium as recited in Claim 23, wherein logically
2 partitioning the next generation network includes determining one or more
3 boundaries of the discrete functional areas based on classifying devices according
4 to roles and responsibilities performed by the devices in delivering network
5 services.

1 26. (NEW) A computer-readable medium as recited in Claim 22, wherein analyzing
2 the information representing the functional areas includes identifying one or more
3 network devices that are involved in each of the functional areas, and for each of

4 the identified devices, determining a setup that is required to enable the identified
5 devices to inter-communicate to provide the services to the subscribers.

1 27. (NEW) A computer-readable medium as recited in Claim 26, further comprising
2 additional instructions which, when executed by the one or more processors,
3 cause defining one or more individual device settings for the setup and storing the
4 individual device settings in a database for use later in actual provisioning.

1 28. (NEW) A computer-readable medium as recited in Claim 27, wherein defining
2 one or more provisioning procedures and identifying one or more required
3 provisioning tools for each of the functional areas, based on the provisioning
4 requirements, includes:
5 identifying one or more of an Element Management System, Dynamic Host
6 Configuration Protocol server, and Domain Name System server as the
7 required provisioning tools;
8 storing in a database table associations of information identifying the functional
9 areas, individual device settings for the setup, and required provisioning
10 tools.

1 29. (NEW) A computer-readable medium as recited in Claim 22, wherein defining
2 one or more provisioning procedures and identifying one or more required
3 provisioning tools for each of the functional areas, based on the provisioning
4 requirements, includes identifying one or more of an Element Management
5 System, Dynamic Host Configuration Protocol server, and Domain Name System
6 server.

1 30. (NEW) A computer-readable medium as recited in Claim 22, wherein creating
2 and storing a sequence of execution of the procedures and tools as the
3 provisioning plan includes analyzing and resolving one or more inter-
4 dependencies of procedures applicable to subscriber CPE devices, access and core
5 network devices, and switches or other processors.

1 31. (NEW) An apparatus comprising a memory carrying instructions which, when
2 executed by one or more processors, cause:
3 creating and storing information that represents a logical decomposition of the next
4 generation network into a plurality of discrete functional areas;
5 analyzing the information representing the functional areas to identify one or more
6 provisioning requirements for each of the functional areas;
7 defining one or more provisioning procedures and identifying one or more required
8 provisioning tools for each of the functional areas, based on the provisioning
9 requirements; and
10 creating and storing a sequence of execution of the procedures and tools as the
11 provisioning plan.

1 32. (NEW) An apparatus as recited in Claim 31, wherein creating and storing information
2 that represents a logical decomposition of the next generation network into a plurality
3 of discrete functional areas includes logically partitioning the next generation network
4 into a subscriber customer premises equipment area, an access network and core
5 network area, and a switch and other processors area.

1 33. (NEW)An apparatus as recited in Claim 32, wherein logically partitioning the next
2 generation network includes determining one or more boundaries of the discrete
3 functional areas based on classifying devices according to functions performed by the
4 devices in delivering network services.

1 34. (NEW)An apparatus as recited in Claim 31, wherein analyzing the information
2 representing the functional areas includes identifying one or more network devices
3 that are involved in each of the functional areas, and for each of the identified
4 devices, determining a setup that is required to enable the identified devices to inter-
5 communicate to provide the services to the subscribers.

1 35. (NEW)An apparatus for systematically analyzing a next generation
2 telecommunications network to result in creating a provisioning plan and procedures
3 for provisioning the network to provide services for one or more subscribers, the
4 apparatus comprising a memory carrying instructions which, when executed by one
5 or more processors cause:
6 creating and storing information that represents a logical decomposition of the next
7 generation network into a plurality of discrete functional areas, by logically
8 partitioning the next generation network into a subscriber customer premises
9 equipment area, an access network and core network area, and a switch and
10 other processors area;
11 analyzing the information representing the functional areas to identify one or more
12 provisioning requirements for each of the functional areas, by identifying one
13 or more network devices that are involved in each of the functional areas, and
14 for each of the identified devices, determining a setup that is required to

15 enable the identified devices to inter-communicate to provide the services to
16 the subscribers;
17 defining one or more provisioning procedures and identifying one or more required
18 provisioning tools for each of the functional areas, based on the provisioning
19 requirements; and
20 creating and storing a sequence of execution of the procedures and tools as the
21 provisioning plan.

1 36. (NEW) An apparatus as recited in Claim 35, wherein logically partitioning the next
2 generation network includes determining one or more boundaries of the discrete
3 functional areas based on classifying devices according to functions performed by the
4 devices in delivering network service.

1 37. (NEW) An apparatus comprising a memory carrying instructions which, when
2 executed by one or more processors, cause performing a systematic analysis of a
3 next-generation telecommunications network before provisioning the next-
4 generation telecommunications network by:
5 creating and storing information that represents a logical decomposition of the
6 next generation network into a plurality of discrete functional areas;
7 analyzing the information representing the functional areas to identify one or
8 more provisioning requirements for each of the functional areas;
9 defining one or more provisioning procedures and identifying one or more
10 required provisioning tools for each of the functional areas, based on the
11 provisioning requirements;
12 creating and storing a sequence of execution of the procedures and tools as the
13 provisioning plan;

14 provisioning the next-generation telecommunications network by executing the
15 procedures and tools identified in the provisioning plan in the sequence
16 identified therein.

1 38. (NEW) An apparatus as recited in Claim 37, wherein creating and storing information
2 that represents a logical decomposition of the next generation network into a plurality
3 of discrete functional areas includes logically partitioning the next generation network
4 into a subscriber customer premises equipment area, an access network and core
5 network area, and a switch and other processors area.

1 39. (NEW) An apparatus as recited in Claim 38, wherein logically partitioning the next
2 generation network includes determining one or more boundaries of the discrete
3 functional areas based on classifying devices according to functions performed by the
4 devices in delivering network services.

1 40. (NEW) An apparatus as recited in Claim 38, wherein logically partitioning the
2 next generation network includes determining one or more boundaries of the
3 discrete functional areas based on classifying devices according to roles and
4 responsibilities performed by the devices in delivering network services.

1 41. (NEW) An apparatus as recited in Claim 37, wherein analyzing the information
2 representing the functional areas includes identifying one or more network
3 devices that are involved in each of the functional areas, and for each of the
4 identified devices, determining a setup that is required to enable the identified
5 devices to inter-communicate to provide the services to the subscribers.

- 1 42. (NEW) An apparatus as recited in Claim 41, wherein the memory further
2 comprises additional instructions which, when executed by the one or more
3 processors, cause defining one or more individual device settings for the setup
4 and storing the individual device settings in a database for use later in actual
5 provisioning.
- 1 43. (NEW) An apparatus as recited in Claim 42, wherein defining one or more
2 provisioning procedures and identifying one or more required provisioning tools
3 for each of the functional areas, based on the provisioning requirements, includes:
4 identifying one or more of an Element Management System, Dynamic Host
5 Configuration Protocol server, and Domain Name System server as the
6 required provisioning tools;
7 storing in a database table associations of information identifying the functional
8 areas, individual device settings for the setup, and required provisioning
9 tools.
- 1 44. (NEW) An apparatus as recited in Claim 37, wherein defining one or more
2 provisioning procedures and identifying one or more required provisioning tools
3 for each of the functional areas, based on the provisioning requirements, includes
4 identifying one or more of an Element Management System, Dynamic Host
5 Configuration Protocol server, and Domain Name System server.
- 1 45. (NEW) An apparatus as recited in Claim 37, wherein creating and storing a
2 sequence of execution of the procedures and tools as the provisioning plan
3 includes analyzing and resolving one or more inter-dependencies of procedures

4 applicable to subscriber CPE devices, access and core network devices, and
5 switches or other processors.

1 46. (NEW)An apparatus comprising:
2 means for creating and storing information that represents a logical decomposition of
3 the next generation network into a plurality of discrete functional areas;
4 means for analyzing the information representing the functional areas to identify one
5 or more provisioning requirements for each of the functional areas;
6 means for defining one or more provisioning procedures and identifying one or more
7 required provisioning tools for each of the functional areas, based on the
8 provisioning requirements; and
9 means for creating and storing a sequence of execution of the procedures and tools as
10 the provisioning plan.

1 47. (NEW)An apparatus as recited in Claim 46, wherein the means for creating and
2 storing information that represents a logical decomposition of the next generation
3 network into a plurality of discrete functional areas includes means for logically
4 partitioning the next generation network into a subscriber customer premises
5 equipment area, an access network and core network area, and a switch and other
6 processors area.

1 48. (NEW)An apparatus as recited in Claim 47, wherein the means for logically
2 partitioning the next generation network includes means for determining one or more
3 boundaries of the discrete functional areas based on classifying devices according to
4 functions performed by the devices in delivering network services.

- 1 49. (NEW)An apparatus as recited in Claim 46, wherein the means for analyzing the
2 information representing the functional areas includes means for identifying one or
3 more network devices that are involved in each of the functional areas, and for each
4 of the identified devices, determining a setup that is required to enable the identified
5 devices to inter-communicate to provide the services to the subscribers.
- 1 50. (NEW)An apparatus for systematically analyzing a next generation
2 telecommunications network to result in creating a provisioning plan and procedures
3 for provisioning the network to provide services for one or more subscribers, the
4 apparatus comprising:
5 means for creating and storing information that represents a logical decomposition of
6 the next generation network into a plurality of discrete functional areas, by
7 logically partitioning the next generation network into a subscriber customer
8 premises equipment area, an access network and core network area, and a
9 switch and other processors area;
10 means for analyzing the information representing the functional areas to identify one
11 or more provisioning requirements for each of the functional areas, by
12 identifying one or more network devices that are involved in each of the
13 functional areas, and for each of the identified devices, determining a setup
14 that is required to enable the identified devices to inter-communicate to
15 provide the services to the subscribers;
16 means for defining one or more provisioning procedures and identifying one or more
17 required provisioning tools for each of the functional areas, based on the
18 provisioning requirements; and

19 means for creating and storing a sequence of execution of the procedures and tools as
20 the provisioning plan.

1 51. (NEW) An apparatus as recited in Claim 50, wherein the means for logically
2 partitioning the next generation network includes means for determining one or more
3 boundaries of the discrete functional areas based on classifying devices according to
4 functions performed by the devices in delivering network service.

1 52. (NEW) An apparatus for performing a systematic analysis of a next-generation
2 telecommunications network before provisioning the next-generation
3 telecommunications network, the apparatus comprising:
4 means for creating and storing information that represents a logical decomposition
5 of the next generation network into a plurality of discrete functional areas;
6 means for analyzing the information representing the functional areas to identify
7 one or more provisioning requirements for each of the functional areas;
8 means for defining one or more provisioning procedures and identifying one or
9 more required provisioning tools for each of the functional areas, based on
10 the provisioning requirements;
11 means for creating and storing a sequence of execution of the procedures and
12 tools as the provisioning plan; and
13 means for provisioning the next-generation telecommunications network by
14 executing the procedures and tools identified in the provisioning plan in
15 the sequence identified therein.

1 53. (NEW) An apparatus as recited in Claim 52, wherein the means for creating and
2 storing information that represents a logical decomposition of the next generation

3 network into a plurality of discrete functional areas includes means for logically
4 partitioning the next generation network into a subscriber customer premises
5 equipment area, an access network and core network area, and a switch and other
6 processors area.

1 54. (NEW) An apparatus as recited in Claim 53, wherein the means for logically
2 partitioning the next generation network includes means for determining one or more
3 boundaries of the discrete functional areas based on classifying devices according to
4 functions performed by the devices in delivering network services.

1 55. (NEW) An apparatus as recited in Claim 53, wherein the means for logically
2 partitioning the next generation network includes means for determining one or
3 more boundaries of the discrete functional areas based on classifying devices
4 according to roles and responsibilities performed by the devices in delivering
5 network services.

1 56. (NEW) An apparatus as recited in Claim 52, wherein the means for analyzing the
2 information representing the functional areas includes means for identifying one
3 or more network devices that are involved in each of the functional areas, and for
4 each of the identified devices, determining a setup that is required to enable the
5 identified devices to inter-communicate to provide the services to the subscribers.

1 57. (NEW) An apparatus as recited in Claim 56, wherein the apparatus further
2 comprises means for defining one or more individual device settings for the setup
3 and storing the individual device settings in a database for use later in actual
4 provisioning.

- 1 58. (NEW) An apparatus as recited in Claim 57, wherein the means for defining one
2 or more provisioning procedures and identifying one or more required
3 provisioning tools for each of the functional areas, based on the provisioning
4 requirements, includes:
5 means for identifying one or more of an Element Management System, Dynamic
6 Host Configuration Protocol server, and Domain Name System server as
7 the required provisioning tools; and
8 means for storing in a database table associations of information identifying the
9 functional areas, individual device settings for the setup, and required
10 provisioning tools.
- 1 59. (NEW) An apparatus as recited in Claim 52, wherein the means for defining one
2 or more provisioning procedures and identifying one or more required
3 provisioning tools for each of the functional areas, based on the provisioning
4 requirements, includes means for identifying one or more of an Element
5 Management System, Dynamic Host Configuration Protocol server, and Domain
6 Name System server.
- 1 60. (NEW) An apparatus as recited in Claim 52, wherein the means for creating and
2 storing a sequence of execution of the procedures and tools as the provisioning plan
3 includes means for analyzing and resolving one or more inter-dependencies of
4 procedures applicable to subscriber CPE devices, access and core network devices,
5 and switches or other processors.